APTERYX AUSTRALIS, Shaw.

Kiwi Kiwi.

Apteryx Australis, Shaw, Nat. Misc., vol. xxiv. Pls. 1057, 1058; and Gen. Zool., vol. xiii. p. 71.—Less. Traité d'Orn., p. 12.—Cuv. Règne Anim., t. i. p. 498, note.—Yarrell, in Trans. Zool. Soc., vol. i. p. 71. Pl. 10.—Owen, Art. Aves, Cycl. of Anat. and Phys., vol. i. 1836, p. 269*, and in Trans. Zool. Soc., vol. ii. p. 257.

Apteryx, Temm. Man. d'Orn. 2nd Edit. Anal., p. exiv. Apterous Penguin, Lath. Gen. Hist., vol. x. p. 394. Dromiceius Novæ-Zelandiæ, Less. Man., t. ii. p. 210. Kiwi-Kiwi, Aborigines of New Zealand.

For our first knowledge of this bird we are indebted to the late Dr. Shaw, to whom the specimen figured by him in the "Naturalists' Miscellany" was presented by Captain Barclay, of the ship Providence, who brought it from New Zealand about 1812. Dr. Shaw's figure was accompanied by a detailed drawing of the bill, foot, and rudimentary wing, of the natural size. After Dr. Shaw's death, his at that time unique specimen passed into the possession of the Earl of Derby, then Lord Stanley. His Lordship's being a private collection, and no other specimen having been seen either on the continent or in England, the existence of the species was doubted by naturalists generally for upwards of twenty years. M. Temminck, it is true, placed it with hesitation in an order to which he gave the title of Inertes, comprehending the present bird and the Dodo; but other naturalists were inclined to deny its existence altogether. The history of the bird remained in this state until June 1833, when my friend Mr. Yarrell published in the "Transactions of the Zoological Society" an interesting paper, detailing all that had been previously made known respecting it, and fully established it among accredited species: this paper was accompanied by a figure from the original specimen still in the possession of the Earl of Derby; I have since had the good fortune to become acquainted with five additional specimens, and to obtain some further information respecting the history of the species. Two of these, from which my figures are taken, were presented to the Zoological Society by the New Zealand Company: the Society also possesses a third, but imperfect specimen, which was presented by Alexander MacLeay, Esq., of Sydney; and two others have been recently added to the collection of the Earl of Derby, one of which having been liberally presented to me by his Lordship, my thanks are especially due for this interesting addition to my collections.

A mature consideration of the form and structure of this most remarkable bird, leads me to assign it with little hesitation to the family of Struthionidæ; and my reasons for doing so will, I think, be obvious to every one who will examine and compare the species with the members of that group. The essential characters in which it differs consist in the elongated form of the bill, in the shortness of the tarsi, and in the possession of a sharp spur, terminating a posterior rudimentary toe. Regarding the Ostrich as the species to which it is least nearly related, we find in the Emu and Rhea a much nearer approach, not only in the more lengthened form of the bill of the latter, but also in the situation of the nostrils, which in the Rhea are placed nearer the tip than in any other species of the group, the Apteryx excepted; in fact, when we compare the bills of these two birds, it is very evident that both are formed on one plan, that of the Apteryx being an elongated representative of the Rhea, with the nostrils placed at the extreme tip: in both these birds there is the same peculiar elevated horny cere or fold. The tarsi are much shorter, and the nails of the toes much more curved than in the Rhea; but the scaly covering of these parts in both birds is precisely the same; and it may be further observed that the number of toes increase as we pass on from the Ostrich, there being only two in that bird, three in the Rhea, Emu, etc., and three with a rudiment of a fourth in the Apteryx. The wing of the Apteryx, although scarcely more than rudimentary, agrees with that of the Rhea in having a strongly hooked claw at its extremity; while in the structure of its feather it approaches nearest to the Cassowary; but unlike what obtains in that bird, the feathers are entirely destitute of the accessory plume, in which latter respect it again agrees with the Rhea. The members of this group, although few in number, are remarkable for their structural peculiarities, each being modified for its own peculiar habits

^{*} I was not aware of the existence of Professor Owen's paper at the time I published my first account of this bird, otherwise it would not have remained unnoticed.

and economy, and in none is this circumstance more remarkable than in the Apteryx, which, at the same time that it departs the farthest in form from the type of the group (the Ostrich), also departs the farthest in its mode of life and general economy; being in fact adapted to the peculiarities of its own country, and fitted for the particular kind of food there to be obtained.

The favourite localities of this bird are those covered with extensive and dense beds of fern, among which it conceals itself, and when hard pressed by dogs, the usual mode of chasing it, takes refuge in crevices of the rocks, hollow trees, and in the deep holes which it excavates in the ground, in the form of a chamber; in these latter situations it is said to construct its nest of dried fern and grasses, and to deposit its eggs, the number and colour of which have not been clearly ascertained.

While undisturbed, says Mr. Short, in a letter to Mr. Yarrell, the head is carried far back in the shoulders, with the bill pointing to the ground; but when pursued it runs with great swiftness, carrying the head elevated like the Ostrich. It is asserted to be almost exclusively nocturnal in its habits, and it is by torch-light that it is usually hunted by the natives, by whom it is sought after with the utmost avidity, the skins being highly prized for the dresses of the chiefs; indeed so much are they valued, that the natives can rarely be induced to part with them. The feathers are also employed to construct artificial flies for the capture of fish, precisely after the European manner. When attacked it defends itself very vigorously, striking rapid and dangerous blows with its powerful feet and sharp spur; with which it is also said to beat the ground in order to disturb the worms upon which it feeds, seizing them with its bill the instant they make their appearance; it also probably feeds upon snails, insects, etc.

A most careful and elaborate paper on the Anatomy of the Apteryx, by Professor Owen, is contained in the second volume of the "Transactions of the Zoological Society of London," quoted above, of which I have availed myself in my observations upon the genus.

It is said to be an inhabitant of all the islands of New Zealand, particularly the southern end of the middle island.

Face and throat greenish brown, all the remainder of the plumage consisting of long lanceolate hair-like feathers, of a chestnut-brown colour, margined on each side with blackish brown; on the lower part of the breast and belly the feathers are lighter than those of the upper surface, and become of a grey tint; bill yellowish horn-colour, its base beset with numerous long hairs; feet yellowish brown.

The Plate represents a male and a female, rather under the natural size.